Printing date 01/28/2014 Reviewed on 01/28/2014

1 Identification

- · Product identifier
- · Trade name: Heavy Duty Steam Compound
- · Article number: 1730 PK
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Power Kleen Corporation 101 South Bayview Blvd. OLDSMAR, FL 34677 USA



Chemical Solutions Since 1973

- Information department: Product Safety Department • Emergency telephone number: ChemTel Inc. (800) 2.
- · Emergency telephone number: ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585

2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

 $sodium\ hydroxide$

disodium metasilicate

· Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dust/fume/gas/mist/vapours/spray.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 4 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:			
1310-73-2	sodium hydroxide	2.5-10%	
68604-71-7	Disodium cocoamphodipropionate	≤ 2.5%	
6834-92-0	disodium metasilicate	≤ 2.5%	
7601-54-9	trisodium orthophosphate	≤ 2.5%	
67-56-1	methanol	≤ 2.5%	

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Do not induce vomiting; immediately call for medical help.

A person vomiting while lying on their back should be turned onto their side.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed

Nausea

Cramp

Methaemoglobinaemia

Gastric or intestinal disorders

- · Danger Danger of gastric perforation.
- · Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours.

USA

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

(Contd. of page 2)

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: glass or ceramic.

· Information about storage in one common storage facility:

Do not store together with acids.

Store away from foodstuffs.

- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 4)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

(Contd. of page 3)

· Control parameters

· Comp	· Components with limit values that require monitoring at the workplace:			
1310-2	1310-73-2 sodium hydroxide			
PEL	Long-term value: 2 mg/m³			
REL	Ceiling limit value: 2 mg/m³			
TLV	Ceiling limit value: 2 mg/m³			
7601-3	7601-54-9 trisodium orthophosphate			
WEEL	Short-term value: 5 mg/m³			
67-56-1 methanol				
PEL	Long-term value: 260 mg/m³, 200 ppm			
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin			
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI			

· Ingredients with biological limit values:

67-56-1 methanol

BEI 15 mg/L

Medium: urine Time: end of shift

Parameter: Methanol (background, nonspecific)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

 $The \ glove \ material \ has \ to \ be \ impermeable \ and \ resistant \ to \ the \ product / \ the \ substance / \ the \ preparation.$

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Fluorocarbon rubber (Viton)

Neoprene gloves Nitrile rubber, NBR Butyl rubber, BR

(Contd. on page 5)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

(Contd. of page 4)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Not suitable are gloves made of the following materials:

Strong gloves Leather gloves

· Eye protection:



Tightly sealed goggles

· Body protection:

Apron

Alkaline resistant protective clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties				
· General Information	F. sF			
· Appearance:				
Form:	Liquid			
Color:	Red			
· Odor:	Characteristic			
· Odour threshold:	Not determined.			
· pH-value at 20 °C (68 °F):	13.8			
· Change in condition				
Melting point/Melting range:	Undetermined.			
Boiling point/Boiling range:	100 °C (212 °F)			
· Flash point:	Not applicable.			
· Flammability (solid, gaseous):	Not applicable.			
· Ignition temperature:				
Decomposition temperature:	Not determined.			
· Auto igniting:	Product is not selfigniting.			
· Danger of explosion:	Product does not present an explosion hazard.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
· Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)			
· Density at 20 °C (68 °F):	1.13 g/cm³ (9.43 lbs/gal)			
· Relative density	Not determined.			
· Vapour density	Not determined.			
· Evaporation rate	Not determined.			

(Contd. on page 6)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

		(Contd. of page
· Solubility in / Miscibility with	,	
Water:	Fully miscible.	
· Partition coefficient (n-octan	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.2 %	
Water:	87.9 %	
VOC content:	1.3 %	
	1.9 g/l / 0.02 lb/gl	
Solids content:	10.8 %	
Other information No further relevant information available.		

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions

Corrodes aluminium.

Reacts with acids.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Sodium Oxides

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Strong caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

(Contd. on page 7)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

(Contd. of page 6)

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

•	UN-	Nun	nber
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· **DOT**, **IMDG**, **IATA** UN1719

· UN proper shipping name

• **DOT** Caustic alkali liquids, n.o.s. (Sodium hydroxide)

· IMDG, IATA CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)

(Contd. on page 8)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

(Contd. of page 7) · Transport hazard class(es)

 $\cdot DOT$



· Class 8 Corrosive substances.

· Label

· IMDG, IATA



· Class 8 Corrosive substances.

· Label

· Packing group

· DOT, IMDG, IATA II

· Environmental hazards:

· Marine pollutant: No

Warning: Corrosive substances · Special precautions for user

· Danger code (Kemler): · EMS Number: F-A,S-BAlkalis · Segregation groups

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation": UN1719, Caustic alkali liquids, n.o.s. (Sodium hydroxide), 8, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara

· Section 355	(extremely	hazardous	substances):

7601-54-9 trisodium orthophosphate

· Section 313 (Specific toxic chemical listings):

7601-54-9 trisodium orthophosphate

7758-29-4 pentasodium triphosphate

67-56-1 methanol

· TSCA (Toxic Substances Control Act):

1310-73-2 sodium hydroxide

68604-71-7 Disodium cocoamphodipropionate

6834-92-0 disodium metasilicate

7601-54-9 trisodium orthophosphate

7758-29-4 pentasodium triphosphate

(Contd. on page 9)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

64-02-8 tetrasodium ethylenediaminetetraacetate (Contd. of page 8)

67-56-1 methanol

7732-18-5 water, distilled, conductivity or of similar purity

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicalsknown to cause reproductive toxicity for males.

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

67-56-1 methanol

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

sodium hydroxide

disodium metasilicate

· Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dust/fume/gas/mist/vapours/spray.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 10)

Printing date 01/28/2014 Reviewed on 01/28/2014

Trade name: Heavy Duty Steam Compound

(Contd. of page 9)

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing MSDS: Environment protection department.
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

USA